

REMARKS

In the Office Action, claims 1-5, 7, 8, 10-14, 16, 17, 19-33, 36 and 37 were rejected. By the present Response, claims 10-14, 16, and 17 are amended. Upon entry of the amendments, claims 1-5, 7, 8, 10-14, 16, 17, 19-33, 36 and 37 will remain pending in the present patent application. Reconsideration and allowance of all pending claims are requested.

Rejections Under 35 U.S.C. § 101

Claims 10-14, 16 and 17

The Examiner rejected claims 10-17 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The Examiner offered alternative language for consideration by the Applicants which would address the Examiner's concerns. The Applicants have amended claims 10-14, 16, and 17 based on the Examiner's provided language. If the Examiner believes that additional or alternative amendment is needed to clarify the nature of the subject matter claimed, the Examiner is encouraged to contact the undersigned at the number below.

Claim 36

In the Office Action, the Examiner rejected claim 36 under 35 U.S.C. § 101 "because it relates to an abstract idea, which falls under the category of being non-statutory." Office Action, p. 3. Applicants respectfully traverse this rejection.

According to the Supreme Court, congress intended statutory subject matter to "include anything under the sun that is made by man." *Diamond v. Chakrabarty*, 447 U.S. 303, 308-09; 206 U.S.P.Q. 193, 197 (1980). Exclusions of statutory subject matter are limited to laws of nature, natural phenomena and abstract ideas. *See Diamond v. Diehr*, 450 U.S. 175, 185; 209 U.S.P.Q. 1, 7 (1981). Other than these specific exceptions, therefore, nearly anything man made is statutorily patentable subject matter under 35 U.S.C. §101.

In determining when process or method claims include statutory subject matter, the Supreme Court in *Diehr* stated that “[t]ransformation and reduction of an article ‘to a different state or thing’ is the clue to the patentability of a process claim that does not include particular machines.” *See id.* 450 U.S. at 183-185, 209 U.S.P.Q. at 6. In addition to the Supreme Court’s transformation and reduction test, the Federal Circuit has developed a second test which may also be used to determine if a claim recites statutory subject matter, namely does the claim produce a “useful, concrete, and tangible result.” *In re Alappat*, 31 U.S.P.Q.2d 1545, 1557 (Fed. Cir. 1994) (*en banc*). The Federal Circuit further elaborated on this second test by holding that one must look to “the essential characteristics of the subject matter, in particular, its practical utility.” *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 47 U.S.P.Q.2d 1596, 1602 (Fed. Cir. 1998).

However, explaining this “useful, concrete, and tangible” test, the Federal Circuit has stated “the dispositive inquiry is whether the claim *as a whole* is directed to statutory subject matter.” *In re Alappat*, 31 U.S.P.Q.2d at 1557. Indeed, there has been no requirement from Congress, the Supreme Court, or the Federal Circuit mandating that a *specific final result* be shown for a claim to qualify under Section 101. *See id.* Rather, the Federal Circuit has specifically stated “the *Alappat* inquiry simply requires an examination of the contested claims to see if the claimed subject matter *as a whole* is a disembodied mathematical concept representing nothing more than a ‘law of nature’ or an ‘abstract idea,’ or if the mathematical concept has been reduced to *some practical application rendering it ‘useful’*.” *AT&T Corp. v. Excel Communications, Inc.*, 50 U.S.P.Q.2d 1447, 1451 (Fed. Cir. 1999) (emphasis added). Therefore, if a claim meets either the transformation and reduction test put forth by the Supreme Court, or if the claim, read as a whole and in light of the specification, produces any useful, concrete, and tangible result, the claim meets the statutory requirements of Section 101. *See id.*

Applicants respectfully assert that the independent claim 36, taken as a whole, recites statutory subject matter under 35 U.S.C. §101 because it produces a useful, concrete and tangible result. The present Application is directed to limiting the information transmitted between a remote operator workstation and a medical imaging system. *See* Abstract. Specifically, the present application discloses methods and apparatuses for preventing a remote operator from taking actions affecting an imaging site that the operator cannot visually observe, such as moving gantries, mechanical arms and so forth. *See* Specification, p. 7, lines 9-15. In this way, different information or actions may be displayed to a local operator as opposed to a remote operator, i.e., different functionality is provided to an operator based on proximity to the imaging system. *See id.* at p. 10, line 15 to p. 11, line 4.

Accordingly, independent claim 36 recites, *inter alia*, “A method for limiting remote access to a medical imaging system comprising: differentiating functionality of a system user interface based on proximity of an operator workstation to a medical imaging device”. This claim, taken as a whole, recites a method for differentiating functionality of an interface based on proximity. This subject matter is not a mathematical algorithm, a natural phenomena, a law or principle of nature or other such concept which might be construed as abstract in nature. Instead, Applicants assert that the act of differentiating functionality of an interface based on proximity is a useful, concrete and tangible result. For example, such a differentiated interface may be used for controlling some functions of a medical imaging device at a distance, while not allowing other such functions to be controlled at a distance. *Id.* Accordingly, Applicants respectfully request withdrawal of the rejection of independent claim 36 under 35 U.S.C. §101.

Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 1-5, 7, 8, 10-14, 16, 17, 19-33, and 37 under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,550,968 (the “Miller reference”) in view of U.S. Patent No. 6,325,540 (the “Lounsberry reference”). In addition, the

Examiner rejected claim 36 under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6,308,273 (the “Goertzel reference”) in view of the Lounsberry reference. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). In view of the Examiner’s failure to establish a *prima facie* case of obviousness, the Applicants respectfully traverse these rejections.

With regard to the Miller reference relied upon by the Examiner, this reference relates to providing restricted access to controls (i.e., visual elements such as icons) of a graphical user interface based upon user authorization. Miller, Abstract; Fig. 5B, 6, and 7a; col. 1, lines 26-29, col. 2, lines 49-59, col. 3, lines 13-19, 32-44, col. 4, lines 7-16, 53-56, line 64 to col. 5, line 2; col. 7, lines 9-24, col. 8, lines 55-65. The Miller reference also describes terminal based authorization but such authorization is still within the context of limiting access to the secure controls to specific users. Miller, col. 3, lines 53-57, col. 4, lines 33-37, col. 9, lines 60-64, col. 10, lines 4-11. Indeed, the emphasis of the Miller reference on limiting access to displayed data based on user authorization is highlighted by the fact that the invention of the Miller reference can be implemented on “an independent workstation having no connection or communication with other computers or computer systems.” Miller col. 5, line 66 to col. 6, line 2. The Miller reference appears to be entirely silent as to the subject matter of limiting access to data or functionality based upon proximity, i.e., remote workstations displaying a different interface with a different functionality than what is displayed locally.

Independent Claims 1, 10, and 19

Conversely, independent claims 1, 10 and 19 recite, *inter alia*, the designation of limited remote access interface regions of a system user interface and the modification of these limited remote access interface regions in screen data sent to a remote operator workstation. Further claim 1 also recites displaying the modified interface regions at a remote operator workstation such that the system user interface has functionality on a

local workstation which is not enabled on a remote workstation. Unlike the teachings of the Miller reference, these claims are not limited in any way by user authorization, i.e., it is not simply a matter of the remote user signing in with an authorized account or providing a password. Instead, as plainly recited in these claims, the user interface has some functionality on the local workstation that is not enabled on the remote workstation. That is, access is based on proximity, not user authorization. Contrary to the Examiner's analysis, this subject matter does not appear to be disclosed in the Miller reference.

For example, the Examiner indicates that the act of designating one or more interface regions of a system user interface as limited remote access interface regions is described in Figs. 7A and 7B of the Miller reference. These figures however, appear to be entirely silent as to designating regions of a system interface for limited remote access. Likewise, the Examiner relies on Figs. 7A and 7B of the Miller reference as disclosing the act of modifying the limited remote access interface regions present in screen data sent to a remote operator workstation for display. Once again, however, these figures appear to be entirely silent as to modifying a remote interface region in screen data sent to a remote workstation. Indeed, as noted above, the Miller reference does not appear to differentiate in any way between local or remote workstations but instead is primarily focused on user authorization in controlling access. Indeed, as noted above, the invention of the Miller reference, including the steps depicted in Figs. 7A and 7B, can be implemented on a single workstation which is not in communication with any other computer or computer system. Miller, col. 5, line 66 to col. 6, line 2.

Further, the Examiner has indicated that the recited subject matter of a system user interface having functionality on the local operator workstation which is not enabled on the remote operator workstation is present in the Miller reference at Fig. 2, and at col. 5, line 65, and col. 8, lines 34-49. The cited passages do not show this subject matter and instead only demonstrate that the invention of the Miller reference can be implemented in a networked environment. As noted above, however, the Miller reference does not

differentiate between local and remote communications and instead focuses on user authorization. The cited passages in no way demonstrate the recited subject matter.

Further, the Lounsberry reference relied upon by the Examiner does not appear to obviate these deficiencies, nor does the Examiner allege otherwise. Therefore, in view of these deficiencies in the Miller and Lounsberry references, no *prima facie* case of obviousness has been made with regard to independent claims 1, 10, and 19. Reconsideration and allowance of independent claims 1, 10, and 19, and of those claims which depend from claims 1, 10, and 19, is therefore respectfully requested.

Independent Claims 7, 16, and 28

Independent claims 7, 16 and 28 recite, *inter alia*, the designation of limited remote access interface regions of a system user interface, the identification of restricted remote inputs in an input stream to a local system where the restricted remote input is generated at a remote workstation, and the removal of the restricted remote inputs from the input stream to prevent remote activation of an imaging system. As noted above, the limitations of these claims, unlike the teachings of the Miller reference, are not limited in any way by user authorization, i.e., it is not simply a matter of the remote user signing in with an authorized account or providing a password. Instead, as plainly recited in these claims, an input stream is modified to remove restricted remote inputs to prevent remote activation of a medical imaging system. That is, manipulation of the input stream is based on proximity, not user authorization. Contrary to the Examiner's analysis, this subject matter does not appear to be disclosed in the Miller reference.

As noted above, contrary to the Examiner's position, the act of designating one or more interface regions of a system user interface as limited remote access interface regions does not appear to be described in Figs. 7A and 7B of the Miller reference or elsewhere in the Miller reference. In addition, the Miller reference appears to be entirely silent as to the subject matter of identifying restricted inputs in an input stream to a local

system and of removing the restricted inputs from the input stream, as recited in the present claims. Instead the technique described in the Miller reference prevents restricted inputs from being generated by obscuring a control such that the security control subclass “does not permit a user to interact with, or otherwise manipulate, the obscured data.” Miller, Fig. 6, 7A, and 7B; col. 8, lines 41-45. Hence, no restricted remote inputs can be generated in the Miller reference since the obscuration which obscures the restricted controls prevents interaction with or manipulation of the restricted controls. *Id.* As a consequence, the Miller reference also does not appear to disclose the removal of such restricted inputs from an input stream, as presently recited.

Further, the Lounsberry reference relied upon by the Examiner does not appear to obviate these deficiencies, nor does the Examiner allege otherwise. Therefore, in view of these deficiencies in the Miller and Lounsberry references, no *prima facie* case of obviousness has been made with regard to independent claims 7, 16 and 28. Reconsideration and allowance of independent claims 7, 16 and 28, and of those claims which depend from claims 7, 16 and 28, is therefore respectfully requested.

Independent Claim 37

Independent claim 37 recites, *inter alia*, a limited communication module configured to provide different functionality to the one or more local operator workstations and the remote operator workstation. Contrary to the Examiner’s assertion, this subject matter does not appear to be disclosed at Fig. 5A or col. 8, lines 40-45 of the Miller reference. As noted above, the limitations of this claims, unlike the teachings of the Miller reference, are not limited in any way by user authorization, i.e., it is not simply a matter of a user signing in with an authorized account or providing a password to get the same functionality at a remote workstation as at a local workstation. Instead, as plainly recited in this claim, the limited communication module is configured to provide different functionality based on proximity, not user authorization, i.e., local and remote workstations are provided with different functionality.

Contrary to the Examiner's analysis, this subject matter does not appear to be disclosed in the Miller reference, which instead provides different functionality based on user authorization or password access. Miller, Abstract; Fig. 5B, 6, and 7a; col. 1, lines 26-29, col. 2, lines 49-59, col. 3, lines 13-19, 32-44, col. 4, lines 7-16, 53-56, line 64 to col. 5, line 2; col. 7, lines 9-24, col. 8, lines 55-65. To the extent that the Miller reference does contemplate control access based on terminal authorization, access is still generally based upon what user is believed to be operating the terminal and, further, there is no indication that one terminal is more distant than another, i.e., proximity is not a factor. Miller, col. 3, lines 53-57, col. 4, lines 33-37, col. 9, lines 60-64, col. 10, lines 4-11. Indeed, as noted above and as explicitly stated in the Miller reference, the invention of the Miller reference can be implemented on a single computer that is not in communication with any other computer or computer system. Miller col. 5, line 66 to col. 6, line 2. This is entirely inconsistent with the present claims, including independent claim 37.

Further, the Lounsberry reference relied upon by the Examiner does not appear to obviate these deficiencies, nor does the Examiner allege otherwise. Therefore, in view of these deficiencies in the Miller and Lounsberry references, no *prima facie* case of obviousness has been made with regard to independent claim 37. Reconsideration and allowance of independent claim 37 is therefore respectfully requested.

Independent Claim 36

Independent claim 36 recites, *inter alia*, differentiating functionality of a system user interface based on proximity of an operator workstation to a medical imaging device. Unlike the remainder of the independent claims, claim 36 is rejected as obvious over the Goertzel reference in view of the Lounsberry reference.

The Goertzel reference is generally directed to the use of location of a connecting user in controlling access to network users. Goertzel, Abstract. In general, the less

trusted the site where the user is accessing the network, the more restricted his or her access. *Id.* While the Goertzel reference discusses restricting network access based on location, it is generally virtual location that is the determinant, not spatial location, i.e., location is a logical concept, not a physical or spatial descriptor. Goertzel, col. 4, line 60 to col. 5, line 25. To the extent that physical location is contemplated by Goertzel, it is still a surrogate measure for the trustworthiness or security of the site. Goertzel, col. 5, lines 26-30. As made clear in the Goertzel reference, proximity to the “local” site is not a factor in restricting access since, “a RAS 68₁, 68₂ dial-up user may be closer in physical distance than user at a remote office 64₁ connecting via a T1 line, even though the dial-up user will ordinarily be considered less secure. As such, as used herein, each location from which a user may connect is considered a virtual location rather than a physical place.” Goertzel, col. 5, lines 20-25 (emphasis added). Hence, the Goertzel reference, though contemplating the use of location in restricting network access, does not contemplate the actual use of proximity in implementing such restrictions but instead focuses on the trustworthiness of the remote site.

Conversely, as noted above, independent claim 36 differentiates functionality of a system based on proximity to another system (here recited as a medical imaging device), not on arbitrary location, virtual or otherwise. Indeed, as clearly noted in the passage of the Goertzel reference quoted above, a physically closer system may be more severely restricted in accordance with the Goertzel reference because proximity is not the determinant. As such, the Goertzel reference does not disclose differentiating functionality of a system user interface based on proximity.

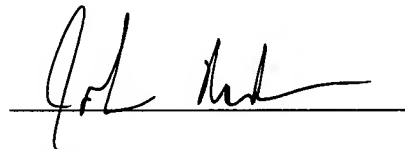
Further, the Lounsberry reference relied upon by the Examiner does not appear to obviate these deficiencies, nor does the Examiner allege otherwise. Therefore, in view of these deficiencies in the Goertzel and Lounsberry references, no *prima facie* case of obviousness has been made with regard to independent claim 36. Reconsideration and allowance of independent claim 36 is therefore respectfully requested.

Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: May 29, 2007

A handwritten signature in black ink, appearing to read 'John M. Rariden', is written over a horizontal line.

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